

Material Safety Data Sheet : Glyphosate 62% IPA Salt**1. Chemical Product and Company Identification**

Product Name	: Glyphosate 62% IPA Salt
Formula	: C ₆ H ₁₇ N ₂ O ₅ P
Molecular Weight	: 228.2
Chemical Name	: Glyphosate Isopropyl amine salt / Glyphosate IPA Salt
Manufacturer	: Sumitomo Chemical India Limited Corporate Office : 13 / 14 Aradhana Industrial Development Corporation, Near Virwani Industrial Estate, Goregaon (East), Mumbai – 400 063
Emergency Contact Details	: +91 22 4252 2200 : +91 22 4252 2209 : +91 278 2212320
Email	: msds@sumichem.co.in
URL	: http://www.sumichem.co.in

2. Composition/Information on Ingredients

Component	CAS No.	% W/W content
Glyphosate isopropyl amine salt (Glyphosate acid equivalent 460 w/w)	38641-94-0 1071-83-6	62%
Other ingredient and water	-	Q. S.

3. Hazard Identification**Emergency Overview****Appearance and odour**

Colourless to pale yellow clear liquid, Odourless to slight amine like odour

WHO Classification

: None – Unlikely to present acute hazard in normal use

Warning Statements

: Keep out of reach of children

Potential Health Effects**Likely Routes of Exposure**

: Skin contact, Inhalation and Ingestion.

Eye Contact

: May cause slight eye irritation and redness to eyes.

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Skin contact : Not irritating to skin but irritation may occur on prolonged contact.

Ingestion : Harmful if swallowed.

Inhalation : Unlikely to cause adverse effect by this route.

Environmental Hazards : The product is herbicide and is therefore expected to be harmful to some weeds/plants.

4. First aid measures and Antidote

Emergency and First Aid Procedure –

If in Eyes : Immediately flush with plenty of clean water for 15-20 minutes. Remove contact lenses if present, after 5 minutes of washing. Get medical attention.

If on Skin : Wash with plenty of clean water and soap. Get medical attention if irritation develops.

If Inhaled : If experiencing any distress/discomfort, immediately remove the affected person to fresh air and obtain medical advice if discomfort does not disappear.

If Swallowed : Immediately offer drinking water to the person, if able to swallow. Get medical attention.

Note to Physician : Treat symptomatically. May be treated as usual against effects of acids or acid fumes.

Antidote : No specific antidote known.

5. Fire Fighting Measures

Flash Point : Not Applicable

Hazardous product of Combustion : The essential breakdown products are carbon monoxide, carbon dioxide, phosphorus pentoxide and nitrogen oxides.

Extinguishing Media : Foam, Dry chemical powder, CO₂ type fire extinguisher or Flood with water.

Unusual Fire and Explosion Hazards : The product does not pose any unusual fire hazard. It is advisable for firemen to avoid direct contact.

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Fire Fighting Measures : Evacuate area and fight fire from a safe distance. Approach from upwind to avoid hazardous vapours and decomposition products. Use self-contained breathing apparatus. Used equipments should be thoroughly decontaminated.

6. Accidental Release Measure

Personal Protection : Observe all protection and safety precautions. Depending on the magnitude of the spill, use eye protection, gloves and shoes during cleaning of spill is recommended. For PPE see Section 8 below.

Steps to be taken in case of a spill : It is recommended to have a predetermined plan / SOP for the handling of spills.

Stop the source of the spill immediately, if safe to do so. Contain the spill to prevent any further contamination of soil or water.

Small spills on the floor or other impervious surface should be mopped up with towels or other absorbent material. Discard the soiled mop / absorbent in the trash. Wash the spill area with water and soap thoroughly.

Large spills on the floor or other impervious surface should be contained or cordoned off first and then absorbed with an inert absorptive material such as, sand, clays, saw dust etc.. Collect the contaminated absorbent and place in suitable containers. Thoroughly scrub the floor or other impervious surfaces with a strong industrial detergent and rinse with water.

Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal through incineration.

7. Handling and Storage

Precautions in Handling : Follow instructions together with all required precautions and personal protection measures given on the label on the packaging

In an industrial environment, such as while making formulation, filling or packing, it is recommended to avoid physical contact with the product and to have adequate ventilation.

Avoid spillage into the eyes, or contact with bare skin or clothing. Avoid inhaling spray mist. Wash hands, feet, face thoroughly after handling. Remove contaminated clothing immediately.

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Precautions in Storage : The product is stable under normal conditions of warehouse storage. Keep container lids tightly closed.

Store above 0°C to avoid crystallization. If crystallization occurs, raise temperature to 20°C and mix well.

Specific Use : The product is meant / approved to be used as herbicide.

8. Exposure Controls/Personal Protection

Exposure Limit Values : Exposure limits have not been established for glyphosate or any other component of this product. However, exposure limit values defined by local regulations may exist and must be checked / observed.

Personal Protection : When used in a closed / automated system, personal protection equipment may not be required. When closed system is not possible in case of maintenance, repair, sampling etc, systems must be made nonhazardous before opening

Respiratory Protection : The product is not likely to pose inhalation exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which produces a vapour or mist, workers should put on respiratory protection equipment with a universal filter

Protective Gloves : Wear appropriate gloves.

Eye Protection : Wear goggles, face shield or safety glasses. It is recommended to have an eye wash fountain available in the work area.

Skin Protection : Wear appropriate protective clothing to prevent direct skin contact

9. Physical and Chemical Properties

Physical State : Clear viscous solution

Appearance : Colourless to light yellow

Odour : Odourless or slight amine like odour

Specific gravity : 1.2 to 1.3 at 20 °C.

pH value : 4.5 to 4.8

Viscosity : Data not available

Vapour Pressure : Not applicable

Vapour Density : Not applicable

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Freezing Point	: < 0 °C
Boiling Point	: > 100 °C
Flash Point	: > 100 °C
Auto Ignition Temp	: Not applicable
Flammable Limits	: Not applicable
Solubility in Water	: Soluble in water

10. Stability and Reactivity

Chemical Stability	: Product is stable at ambient temperature.
Materials to Avoid	: Do not mix or store this product in galvanised or unlined steel containers (except stainless steel)
Hazardous Decomposition Product	: None
Hazardous Polymerisation	: Do not occur

11. Toxicological Information

Health Hazards	: Refer to section no. 3 above.
Acute Toxicity	: The product is practically non-toxic. However, it should be treated with the usual care of handling chemicals.
Route(s) of Entry	
Ingestion	: LD ₅₀ , oral, rat: > 5000 mg/kg body weight
Skin	: LD ₅₀ , dermal, rat: > 2000 mg/kg body weight
Inhalation	: 4 hour LC ₅₀ , rat: > 1.21 mg/L air.

12. Ecological Information

Acute Oral Toxicity in Birds	: In Chicken > 5000 mg/kg In Pigeon > 5000 mg/Kg
Acute Toxicity in Fish	: Fresh water Fish (Tilapia Mossambica) LC ₅₀ (96 hrs) >1000mg/L
Acute Toxicity Honey bees	: LC ₅₀ 24 Hrs. (Apis Cerana Indica) > 100 µg/bee (tropical application)

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13. Disposal Considerations

Waste Treatment Methods : Keep out of drains, sewers, ditches and waterways.
Left-over material that should not be used or chemically reprocessed and should be disposed of in a landfill approved for pesticide disposal. Other possible methods of disposal are controlled incineration with flue gas scrubbing.

Containers : Empty containers may retain vapour and product residue. Observe all safeguards mentioned in label until container is cleaned or destroyed.

Triple rinse or pressure rinse empty containers. Collect rinse water in a tank. Dispose through approved waste disposal service.

Do not re-use containers.

Disposal of waste and packaging materials must always be in accordance with all applicable local laws / regulations.

14. Transport Information

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Not classified as dangerous goods under the applicable DOT, ICAO/IATA, IMO, TDG

IMDG classification

Proper Shipping Name : Environmentally hazardous Substance, Liquid , n.o.s.
(Glyphosate 62% IPA salt)
Class / Division : 9
Subsidiary hazard(s) : -
UN No. : 3082
Packing group : III
IMDG Marine pollutant : No

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15. Regulatory Information

Contains : Glyphosate 62% IPA salt (CAS No. 38641-94-0)

Regulatory Status : The product is meant for the production of herbicide which should be used for the applications they are registered for, in accordance with an officially approved label

16. Other Information

This MSDS is intended for worker and transport safety. It summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

This material should be handled by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

This MSDS is not intended for product users who should refer to the product label for safety precautions applicable to them.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product may vary and situations unforeseen by Sumitomo Chemical India Limited may exist. The user has to check the validity of the information under local circumstances.